

PROPELLANTS

A propellant is a low explosive that because of its regularity of burning produces a large volume of gas with the evolution of heat. Shown below are some of the standard propellants used by military systems throughout the world. If you know of any more let me know and I will add them to the table.

PROPELLANT	CONSTITUENTS
ALBANITE (DUPONT)	19.5% DINA 20% NC 55% NITROGUANADINE 4% DIBUTYLPHTHALATE 1% CENTRALITE No. 1 + POT SULPHATE + Pb.
ASN SOLVENTLESS	36.25% NG 50% NC 5.75% CARBAMITE 8% DIBUTYLPHTHALATE
BALLISTITE (USA) SAA	60% NC (13.25% N) 39% NG 1% DIPHENYLAMINE COATED WITH GRAPHITE
BALLISTITE A	39.5% NG 60.5% NC
BALLISTITE B16	38% NG 60% NC 1.5% POTASSIUM NITRATE .6% GRAPHITE .5% CARBAMITE
BENITE (USA)	40% NC 44.3% POTASSIUM NITRATE 6.3% SULPHUR 9.4% CHARCOAL .5% ETHYL CENTRALITE
BULLSEYE (USA) SAA	59.6% NC (13.25% N) 40% NG .4% DIPHENYLAMINE COATED WITH GRAPHITE
CARBINE BALL POWDER (USA)	89.3% NC (13.2% N) 9% NG .15% SODIUM SULPHATE .65% CALCIUM CARBONATE .9% DIPHENYLAMINE
COMPOSITE PROPELLANT (USA) ROCKET	40.7% AMMONIUM PICRATE 49.8% POTASSIUM NITRATE 4.5% ETHYL CELLULOSE 4.5% CHLORINATED WAX .5% CALCIUM STEARATE
CORDITE A	25.5% NG 56.5% NC 4.5% CARBAMITE 3.5% MINERAL JELLY
CORDITE AN	25.5% NG 56.5% NC 4.5% CARBAMITE .7% POTASSIUM NITRATE 3.5% MINERAL JELLY
CORDITE CDT	30% NG 65% NC .5% CARBAMITE 4.5% MINERAL JELLY
CORDITE HSC	47% NG 49.5% NC 3.5% CARBAMITE
CORDITE MC	30% NG 65% NC 5% "CRACKED" MINERAL JELLY
CORDITE MD	30% NG 65% NC

	5% MINERAL JELLY
CORDITE MK 1	58% NITROGLYCERENE 17% NITROCELLULOSE 5% MINERAL JELLY
CORDITE N (ARMY)	19% NG 18.7% NC 55% PICRITE 7.3% CARBAMITE
CORDITE NF OR MNF (NAVY)	21% NG 16.5% NC 55% PICRITE 7.5% CARBAMITE + POTASSIUM SULPHATE
CORDITE NQ (ARMY)	20.6% NG 20.8% NC 55% PICRITE 3.6% CARBAMITE
CORDITE NQF OR MNQF (NAVY)	21% NG 21% NC 55% PICRITE 3% CARBAMITE + POTASSIUM SULPHATE
CORDITE RDB	42% NG 52% NC 6% MINERAL JELLY
CORDITE SC	41.5% NG 49.5% NC 9% CARBAMITE
CORDITE W	29% NG 65% NC 6% CARBAMITE
CORDITE WM	29.5% NG 65% NC 2% CARBAMITE 3.5% MINERAL JELLY
DINA	BISNITROXYETHYLNITRAMINE
EC POWDER (USA) SAA	80% NC (13.2% N) 8% BARIUM NITRATE 8% POTASSIUM NITRATE 3% STARCH .25% DYE AURINE .75% DIPHENYLAMINE
FIVONITE	TETRAMETHYLOLCYCLOPENTANONE TETRANITRATE
FNH (DUPONT)	84% NC 1% DIPHENYLAMINE 10% DINITROTOLUENE 5% DIBUTYLPHTHALATE
FNH/P	83% NC 1% DIPHENYLAMINE 5% DIBUTYLPHTHALATE 10% DINITROTOLUENE 1% POTASSIUM SULPHATE
HERCULES (81mm MORTAR)	57.75% NC .75% DIPHENYLAMINE 1.5% POTASSIUM NITRATE
IMR (USA) SAA	97.4% NC (13.15% N) 2% TIN .6% DIPHENYLAMINE GLAZED WITH GRAPHITE & COATED WITH DINITROTOLUENE
INFALLIBLE (USA) SAA	60.25% NC (13.25%) 39% NG .75% DIPHENYLAMINE COATED WITH GRAPHITE
M1 (USA) ARTILLERY (1920/40)	84.2% NC (13.5% N) 9.9% DINITROTOLUENE 4.9% DIBUTYLPHTHALATE 1% DIPHENYLAMINE
M10 (USA) ARTILLERY	98% NC (13.15% N) 1% POTASSIUM SULPHATE 1% DIPHENYLAMINE
M12 (USA) ARTILLERY	97.7% NC (13.15% N) .75% POTASSIUM SULPHATE

	.75% TIN .8% DIPHENYLAMINE COATED WITH DINITROTOLUENE
M13 (USA) ROCKET	57.3% NC (13.15% N) 40% NG 1.5% POTASSIUM SULPHATE .05% CARBON BLACK .2% TRIACETIN 1% DIPHENYLAMINE
M14 (USA) ARTILLERY	89.1% NC (13.15% N) 7.9% DINITROTOLUENE 2% DIBUTYLPHTHALATE 1% DIPHENYLAMINE
M15 (USA) ARTILLERY	20% NC (13.15% N) 19% NG 54.7% NITROGUANADINE .3% CRYOLITE 6% ETHYL CENTRALITE
M2 (USA) ARTILLERY	77.45% NC (13.25% N) 19.5% NG 1.4% BARIUM NITRATE .75% POTASSIUM NITRATE .6% ETHYL CENTRALITE .3% GRAPHITE
M3 (USA) ARTILLERY (1920/40)	79% NC (12.6% N) 15% TNT 5% TRIACETIN 1% DIPHENYLAMINE
M4 (USA) ARTILLERY	76% NC (13.25% N) 23% DINITROTOLUENE 1% DIPHENYLAMINE
M4X DUPONT	32% NG 66.15% NC 1% GRAPHITE .6% DIPHENYLAMINE .25% POTASSIUM SULPHATE
M5 (USA) ARTILLERY	81.95% NC (13.25% N) 15% NG 1.4% BARIUM NITRATE .75% POTASSIUM NITRATE .6% ETHYL CENTRALITE .3% GRAPHITE
M6 (USA) ARTILLERY (1920/40)	86.1% NC (13.15% N) 9.9% DINITROTOLUENE 3% DIBUTYLPHTHALATE 1% DIPHENYLAMINE
M7 (USA) ROCKET	54.6% NC (13.15% N) 35.5% NG 7.8% POTASSIUM PERCHLORATE 1.2% CARBON BLACK .9% DIPHENYLAMINE
M8 (USA) MORTAR INCR	52.15% NC (12.25% N) 43% NG 3% DIETHYLPHTHALATE 1.25% POTASSIUM NITRATE .6% ETHYL CENTRALITE
M9 (USA) MORTAR IGN	57.75% NC (13.25% N) 40% NG 1.5% POTASSIUM NITRATE .75% DIPHENYLAMINE
MK I (USA) SAA	99.3% NC (13.15% N) .7% DIPHENYLAMINE GLAZED WITH GRAPHITE & COATED WITH DINITROTOLUENE
MK II (USA) SAA	98.3% NC (13.15% N) 1% POTASSIUM SULPHATE .7% DIPHENYLAMINE GLAZED WITH GRAPHITE & COATED WITH DINITROTOLUENE
MK III (USA) SAA	99% NC (13.1% N) 1% DIPHENYLAMINE GLAZED WITH GRAPHITE

	COATED WITH DINITROTOLUENE
MK III (USA) A VARIATION SAA	99.6% NC (13.1% N) .4% DIPHENYLAMINE GLAZED WITH GRAPHITE COATED WITH DINITROTOLUENE
MK IV (USA) SAA	98.95% NC (12.95% N) 1.05% DIPHENYLAMINE GLAZED WITH GRAPHITE COATED WITH DINITROTOLUENE
NC (Y)	83% NC 5% CAMPHOR 12% BARIUM NITRATE
NC (Y) A VARIATION	76.5 NC 3.5% MINERAL JELLY 2.5% CAMPHOR 2% STARCH 2% WOODMEAL 2% POTASSIUM NITRATE 11.5% BARIUM NITRATE
NCT	99.5% NC .5% DIPHENYLAMINE
NH (DUPONT)	86% NC 1% DIPHENYLAMINE 10% DINITROTOLUENE 3% DIBUTYLPHTHALATE
NH (HERCULES)	82% NC .9% DIPHENYLAMINE 17% DINITROTOLUENE
NOBELS RIFLE NEONITE	99.05% NC .95% DIPHENYLAMINE .5% GRAPHITE
NOBELS SUPERIM	24% NG 73% NC 3% CARBAMITE .6% GRAPHITE
T 2 (USA) ROCKET	58% NC (13.15% N) 30% NG 1.5% POTASSIUM SULPHATE .02% CARBON BLACK 2.5% DINITROTOLUENE 8% DIPHENYLAMINE
T5 (USA) ROCKET	57.5% NC (13.15% N) 39.2% NG 1.5% POTASSIUM SULPHATE .05% CARBON BLACK .1% LEAD STEARATE 1.7% DIPHENYLAMINE
T8 (USA) ROCKET	58% NC (13.15% N) 22.5% NG 2.5% DINITROTOLUENE .5% LEAD STEARATE 8% DIPHENYLAMINE